

REMARKS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments, declaration, and remarks herewith, which place the application into condition for allowance or into better condition for appeal.

Claims 1, 2, 7-12, 15, 19, 22-24, 29, 31 and 33-37 are pending in this application. Claims 1, 2, 7, 8, 10, 15, 23, 34, and 36 are amended, without prejudice. Applicant reserves the right to pursue cancelled subject matter in a divisional application.

No new matter is added.

The amendments and the remarks made herein are not made for reasons related to patentability and, thus, do not prevent the application of the doctrine of equivalents. Support for the amended recitations in the claims are found throughout the specification and from the pending claims.

The Examiner has pointed out errors in the claim language regarding the terms, for example, “encode”, “lead”, and “comprises”. These errors have now been corrected with the amendments submitted herewith.

Claim 15 was objected to under 37 C.F.R. 1.75(c) as allegedly being in improper form because a multiple dependent claim cannot depend upon another multiply dependent claim. Claim 15 has been amended accordingly to address this objection.

Claims 1, 7-12, 15, 19, 22-24, 29, 31 and 33 were rejected under 35 U.S.C. §112, second paragraph, for allegedly being indefinite. This rejection is respectfully traversed. Claim 1 was rejected as being indefinite in its recitation of “one foreign nucleic acid molecule...selected from the group consisting of a) DNA molecules...” Claim 1 has now been amended accordingly.

Claims 1, 8, and 10 were rejected as being indefinite in their recitation of “antisense RNA...which lead via a cosuppression effect”. The Examiner contends that the recitation is confusing, since sense RNA molecules cause cosuppression. Claims 1, 2, 8, 10, 34, and 36 have been amended to recite “at least one sense RNA” to better define the mechanism of cosuppression used to decrease the expression of GBSSI and BEI proteins. It is believed that with the addition of the “at least one sense RNA” recitation that the rejection is moot. Reconsideration and withdrawal of the rejection are therefore, respectfully requested.

Claims 1-2, 7-12, 15, 19, 22-24, 29, 31 and 33 were rejected under 35 U.S.C. §112, first paragraph, as allegedly lacking written description; and claims 1-2, 7-12, 15, 19, 22-24, 29, 31, 33, and 34-37 were rejected under 35 U.S.C. §112, first paragraph, for allegedly lacking enablement. The rejections are traversed.

With respect to the §112, first paragraph, rejections, written description and enablement exist. The Examiner is directed to the Declaration of Dr. Volker Landschütze, submitted herewith, which states that it is well within the skill of one in the art to choose nucleic acid sequences from any plant or any gene that achieves the effect of decreasing the expression of endogenous genes encoding GBSSI and BE proteins. The specification of the application supports these statements, for example, on page 9, lines 6-23, which state that the decrease in the GBSSI and/or the BE activity in the plant cells is achieved by a cosuppression effect. The breadth of knowledge of the skilled artisan allows one to search for and use sequences that may not necessarily be directed to a potato GBSSI and/or BE gene, but also to other plants that express GBSSI and/or BE genes. Depending on the level of homology, GBSSI and/or BE sequences from plant species other than the plant of interest (for example, potato) may be used to effect gene silencing in the plant of interest. It is well within the purview of the skilled artisan to

perform gene homology searches and sequence alignments using well-known algorithms, such as BLAST. The specification clearly points out that the minimum level of homology can be about 65% (see page 9, line 19). This level of homology also allows the skilled artisan to select sequences that comprise about 65% homology that may or may not necessarily correspond to GBSSI, BE, or homologs thereof, but nevertheless achieve the same effect of gene silencing, without undue experimentation.

Similarly, the skilled artisan would doubtlessly be familiar with use of sequences other than those of the coding sequence of the gene of interest. Cosuppression can occur when the sequences are the 5' or 3' untranslated sequences of the gene of interest. Using any sequence that impinges on the expression levels of the gene of interest would fundamentally achieve the same result as using the coding sequence.

Consequently, reconsideration and withdrawal of the §112, first and second paragraph, rejections are respectfully requested.

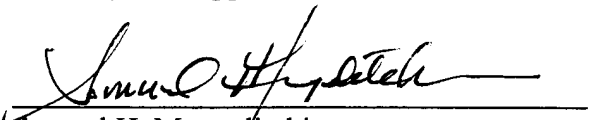
CONCLUSION

In view of the remarks, declaration, and amendments herewith, the application is in condition for allowance. Favorable reconsideration of the application and prompt issuance of a Notice of Allowance are earnestly solicited.

Respectfully submitted,

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